



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0966; Directorate Identifier 2013-CE-040-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Rockwell Collins, Inc. Transponders**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Rockwell Collins TPR-720 and TPR-900 Mode select (S) transponders that are installed on airplanes. This proposed AD was prompted by the identification that the TPR-720 and TPR-900 Mode S transponders respond intermittently to Mode S interrogations from both ground-based and traffic collision avoidance system (TCAS-) equipped airplanes. This proposed AD would require testing and calibration of the alignment of the transponders. We are proposing this AD to correct the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Rockwell Collins, Inc., Collins Aviation Services, 350 Collins Road NE, M/S 153-250, Cedar Rapids, IA 52498-0001; telephone: 888-265-5467 (U.S.) or 319-265-5467; fax: 319-295-4941 (outside U.S.); email: [techmanuals@rockwellcollins.com](mailto:techmanuals@rockwellcollins.com); Internet: [http://www.rockwellcollins.com/Services\\_and\\_Support/Publications.aspx](http://www.rockwellcollins.com/Services_and_Support/Publications.aspx). You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Roger A. Souter, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: 316-946-4134; facsimile: 316-946-4107; email address: [roger.souter@faa.gov](mailto:roger.souter@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-0966; Directorate Identifier 2013-CE-040-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory,

economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

FAA surveillance and testing of Mode S transponders, associated with an upcoming change to the National Airspace System (NAS) ground-based system software, exposed a deficiency in the capability of the Rockwell Collins TPR-720 and TPR-900 series transponders to properly respond to Mode S interrogations from both ground-based radars and TCAS-equipped airplanes.

FAA and Rockwell Collins, Inc. investigated the deficiency with the transponders and determined that age and lack of depot-level maintenance may cause a shift in the sync phase reversal tolerance causing intermittent replies to the Mode S and TCAS II interrogations. The transponder receiver misalignment requires calibration to correct the problem.

This unsafe condition, if not corrected, could result in possible misalignment issues with the transponders that could lead to increased pilot and air traffic controller workload as well as reduced separation of airplanes.

### **Relevant Service Information**

Rockwell Collins, Inc. issued Service Information Letter 13-1, 523-0821603-101000, Revision No. 1, dated October 24, 2013. The service letter describes procedures for testing the transponders for proper alignment.

### **FAA’s Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **Proposed AD Requirements**

This proposed AD would require testing and calibration of the alignment of the TPR-720 and TPR-900 Mode S transponders.

### **Costs of Compliance**

We estimate that this proposed AD affects 4,000 products that are installed on airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Test and calibration of the transponders	4 X \$85 per hour = \$340	Not applicable	\$340	\$1,360,000

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Rockwell Collins, Inc.:** Docket No. FAA-2013-0966; Directorate Identifier 2013-CE-040-AD.

**(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

**(b) Affected ADs**

None.

**(c) Applicability**

(1) This AD applies to the following Rockwell Collins, Inc. Mode S transponders that are installed on but not limited to the airplanes listed in paragraphs (c)(2)(i) and (c)(2)(ii) of this AD:

(i) TPR-720: CPN 622-7878-001, 622-7878-020, 622-7878-120, 622-7878-200, 622-7878-201, 622-7878-301, 622-7878-440, 622-7878-460, 622-7878-480, 622-7878-901; and

(ii) TPR-900: CPN 822-0336-001, 822-0336-020, 822-0336-220, 822-0336-440, 822-0336-460, 822-0336-480, 822-0336-902.

(2) The products listed in paragraphs (c)(1)(i) and (c)(1)(ii) of this AD may be installed on but not limited to the following airplanes, certificated in any category:

(i) Airbus Models A319, A320, A330, A340; and

(ii) Boeing Models B777, B747, MD-80, and DC-9.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 34, Navigation.

**(e) Unsafe Condition**

This AD was prompted by the identification that the TPR-720 and TPR-900 Mode S transponders respond intermittently to Mode S interrogations from both ground-based and traffic collision avoidance system equipped airplanes. We are issuing this AD to correct possible misalignment issues with the transponders that could result in increased pilot and air traffic controller workload as well as reduced separation of airplanes.

**(f) Compliance**

Comply with this AD within the compliance times specified in paragraph (g) of this AD, unless already done.

**(g) Test and Calibration**

Within the next 2 years after the effective date of this AD and repetitively thereafter at intervals not to exceed every 4 years, send the TPR-720 and TPR-900 Mode S transponders to a certified repair facility for test and calibration to assure proper alignment following Rockwell Collins, Inc. Service Information Letter 13-1, 523-0821603-101000, Revision No. 1, dated October 24, 2013.

**(h) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (i)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(i) Related Information**

(1) For more information about this AD, contact Roger A. Souter, FAA, Wichita ACO, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: 316-946-4134; facsimile: 316-946-4107; email address: roger.souter@faa.gov.

(2) For service information identified in this AD, contact Rockwell Collins, Inc., Collins Aviation Services, 350 Collins Road NE, M/S 153-250, Cedar Rapids, IA 52498-0001; telephone: 888-265-5467 (U.S.) or 319-265-5467; fax: 319-295-4941 (outside U.S.); email: techmanuals@rockwellcollins.com; Internet: [http://www.rockwellcollins.com/Services\\_and\\_Support/Publications.aspx](http://www.rockwellcollins.com/Services_and_Support/Publications.aspx). You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on November 11, 2013.

Earl Lawrence,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-27640 Filed 11/18/2013 at 8:45 am; Publication Date: 11/19/2013]